

ABSTRACT OF THE DISCLOSURE

This invention includes methods of depositing a silicon dioxide comprising layer in the fabrication of integrated circuitry, and to methods of forming trench isolation in the fabrication of integrated circuitry. In one implementation, a method of depositing a silicon dioxide comprising layer in the fabrication of integrated circuitry includes flowing an aluminum containing organic precursor to a chamber containing a semiconductor substrate effective to deposit an aluminum comprising layer over the substrate. An alkoxysilanol is flowed to the substrate comprising the aluminum comprising layer within the chamber effective to deposit a silicon dioxide comprising layer over the substrate. At least one halogen is provided within the chamber during at least one of the aluminum containing organic precursor flowing and the alkoxysilanol flowing under conditions effective to reduce rate of the deposit of the silicon dioxide comprising layer over the substrate than would otherwise occur under identical conditions but for providing the halogen. Other implementations are contemplated.